7. Uses Decisions

A. DLnat

The FACDQ recommends the PWG explore the deletion of DLnat, the possible policy changes to the document, and their implications for bringing back to the FACDQ. The PWG will also explore other policy issues not completed at the June 2007 meeting.
Straw Vote: 15 Agree, 3 Not Opposed, 0 Disagree *(6/807 PM)*
***Vote*: 16 Agree, 1 Not Opposed, 0 Disagree, 1 Absent** *(6/8/07 PM)*

B. Uses Document

The FACDQ directs the FACDQ Work Groups to use the straw vote decisions as a starting point for writing the Uses portion of the Final Report and other activities subject to revisions based on a final vote to occur later.
***Vote*: 16 Agree, 0 Not Opposed, 0 Disagree, 2 Absent** *(6/8/07 PM)*

- ***A subscript "nat" is used to designate the nationally-promulgated DL or QL – DL_{nat} or QL_{nat}***
- ***A subscript "lab" is used to designate the laboratory-specific DL or QL – DL_{lab} or QL_{lab}***
- ***A subscript "per" is used to designate the permit-specified QL – QL_{per}***
- ***A subscript "st" is used to designate the state-optional DL or QL – DL_{st} or QL***

The FACDQ agreed to allow EPA come up with a new acronym for a situation where an analyte is detected below the QL_{per}. The acronym will replace "DNQ" and must fit into the conditions of the ICIS system. The facilitator used the acronym "DBQp" for purposes of completing this document. *(6/7/07 PM)*

1. Lab-Determined Detection Limits (DL_{lab}s) and Quantitation Limits (QL_{lab}s)

Recommendation: The FACDQ recommends that EPA promulgate the descriptive single-laboratory procedure(s) recommended by the FACDQ for individual laboratories to determine their Detection and Quantitation Limits. The procedure(s) should have the following two capabilities:

- Demonstrate the lab's performance at a specified level.
- Determine the lowest possible value achievable by the lab.

The FACDQ further recommends that the descriptive procedure(s) replace the one currently in 40 CFR Part 136 Appendix B.

2. Method Promulgation

Recommendation: The FACDQ recommends that when the EPA promulgates future analytical methods in 40 CFR Part 136, quantitation limits (QL_{nat}s) shall be included with the methods using the procedure(s) recommended by the FACDQ.

Deleted: Detection Limits (DL_{nat}s) and

The FACDQ agreed to remove all language referring to a published table of limits in a promulgated rule in 40 CFR Part 136 as well as the pre-existing footnote. *(6/7/07*

The FACDQ also agreed to remove the following language though it was agreed that the Final Report Work Group would keep it under consideration when drafting an introductory paragraph: "These limits will serve to define the minimum required performance of a laboratory and may assist in comparing performance of one method to another (facilitating selection of a method most suitable for a given use), and may define important thresholds for use in evaluating compliance. (See the section titled "NPDES Permits and Compliance Uses, Recommendation 5.A & B")." *(6/7/07 AM)*

3. Verification of Laboratory Proficiency of Detection and Quantitation Limits

Recommendation: The FACDQ recommends developing a process for initial and on-going verification of DL_{lab}s and QL_{lab}s by laboratories. This recommendation includes the following guidance:

- The FACDQ recommended procedure (e.g., what goes into 40 CFR Part 136 Appendix B) should include on-going verification of DL_{lab} and QL_{lab} (either explicitly within the procedure or as an "attachment" if the FACDQ chooses to recommend a consensus procedure)
- Meeting MQOs for use
- Separate initial vs. on-going verifications
- Strive for feasibility, practicality, representativeness, and cost-effectiveness

The FACDQ agreed to replace "demonstration" from this section with the word "verification" and to strike the pre-existing footnote and to add the bullet: "Meeting MQOs for use." *(6/7/07 AM)*

4. Future Updates of Promulgated Analytical Method *QL_{nat}s*

Recommendation: The FACDQ recommends that EPA periodically review current capabilities of promulgated analytical methods. The focus of this review should be on methods where there have been significant improvements in Quantitation Limits or on methods that do not contain QL_{nat}s. This review would be particularly important for cases where Quantitation Limits are critical to the permit program (e.g., those required for very low WQBELs). EPA should focus on analytes for which current methods provide poor performance or do not meet program needs. Using best judgment and where resources are available, EPA shall update QL_{nat} limits on an on-going basis. EPA should also consider information submitted by states and/or other qualified third parties. EPA shall publish a Federal Register Notice announcing the QL_{nat}s it proposes to update. Provisions later in this document are for the purpose of providing EPA with robust data sets for updating and or creating QL_{nat}s.

Deleted: ***DL_{nat}s* and**

Deleted: Detection or

Deleted: DL_{nat}s or

Deleted: Detection and

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Deleted: DL_{nat}s and

The FACDQ agreed to leave #4 as it is with the understanding that "shall" (…EPA shall update QL_{nat} limits on an on-going basis.) will remain. *(6/7/07 AM)*

Deleted: DL_{nat} and

5. The FACDQ recognizes that the existence of WQBELs at concentrations less than quantitation limits presents a number of NPDES-related issues. These include appropriate approaches for:

- Calculating monthly averages
- Determining compliance with daily maximum limits and monthly average limits
- Reporting data, and
- Appropriate compliance response in light of data uncertainty and the need for the protection of public health and the environment.

To deal with these various issues, the FACDQ recommends a balanced response as outlined below.

States that have been delegated the NPDES program from EPA have the authority under the Clean Water Act to adopt regulatory provisions that are different, but no less stringent than, those required under federal regulations. Such provisions, if authorized or not prohibited by state law, would operate in lieu of the following recommendations and could include a QL_{st} value lower than the nationally promulgated QL_{nat}. In that case, the QL_{st} applicable under the state program would be used for determining compliance, reporting, and other applicable requirements.

A. Recommendations for NPDES Permits and Compliance Uses where a QL_{nat} exists and for WQBELs at concentrations less than QL_{nat}. If the permitting authority requires use of a method more sensitive than the method for which a QL_{nat} exists, go to section B:

The FACDQ agreed to include the following language: "If the permitting authority requires use of a method more sensitive than the method for which a QL_{nat} exists, go to section B."
Straw Poll: 14 Agree, 4 Not Opposed, 0 Disagree *(6/7/07 PM)*

1) The FACDQ recommends that a Part 136 QL_{nat} determined by the procedure recommended by the FACDQ be promulgated for each method/analyte combination which shall be the upper bound for lab performance. The regulator shall insert QL_{per}s in permit or in rule as appropriate. The default QL_{per} is the lowest Part 136 promulgated QL_{nat}. The regulator would then consider whether the method associated with this QL_{nat} is the most appropriate method considering sensitivity, selectivity, and/or matrix effects and adjust the QL_{per} accordingly.

Deleted: DL_{nat} and

The FACDQ agreed not to include the following language: "All the following does not apply if the QL_{nat} is not the most sensitive method $QL_{nat.}$"
Straw Poll: 8 Agree, 8 Not Opposed, 2 Disagree

The FACDQ agreed to the following language: "…the method associated with this QL_{nat} is the most appropriate method considering sensitivity…"
Straw Poll: 18 Agree, 0 Not Opposed, 0 Diagree *(6/7/07 PM)*

The FACDQ agreed to the following language: The regulator shall insert QL_{per}s in permit or in rule as appropriate.
Straw Poll: 15 Agree, 3 Not Opposed, 0 Disagree *(6/7/07 PM)*

2) The permit shall also contain a condition that the permittee's QL_{lab} shall be at or below the $QL_{per.}$ The permit shall require permittees to report DL_{lab}s and QL_{lab}s as determined by the procedure recommended by the FACDQ and maintain such information for a period of at least five years.

The FACDQ agreed to remove the following language: "The QL_{per} shall be applicable for the term of the permit unless the regulator reopens and modifies the permit" as well as #3 with the two options regarding the life of the permit.
Straw Poll: 9 Agree, 9 Not Opposed, 0 Disagree *(6/7/07 PM)*

3) For a list of analytes as defined by EPA, the permittee shall ensure that the DL_{lab}s and QL_{lab}s are determined using the steps of the procedure to determine the lowest possible value by the lab for setting QL_{lab}s and DL_{lab}s.

The FACDQ agreed on the following language:
3) For a list of analytes as defined by EPA, the permittee shall ensure that the DL_{lab}s and QL_{lab}s are determined using the steps of the procedure to determine the lowest possible value by the lab for setting QL_{lab}s and DL_{lab}s.
Straw Poll: 10 Agree, 8 Not Opposed, 0 Disagree *(6/7/07 PM)*

4) The FACDQ further recommends, for purposes of updating Part 136 QL_{nat}s, that EPA require the lab-specific information be reported in the IntegratedCompliance Information System (ICIS).

Deleted: DL_{nat}s and

The FACDQ agreed to return to the option of deleting the new **4)** if it is found to be duplicative in later sections of the document. *(6/7/07 PM)*

5) Implementation in NPDES Permits:
- **a)** Set average and daily maximum permit limits at the WQBEL.
- **b)** Assign zero for values less than the permit QL_{per} when determining average and daily maximum discharge levels.

The FACDQ agreed to rename the title of the new section 5 from:
"***Recommendation for NPDES Permits and Compliance Uses for WQBELs when QL_{nat}s do exist" to*** "Implementation in NPDES Permits." *(6/7/07 PM)*

Rationale: While the FACDQ recognizes that values between a given laboratory's DL_{lab} and QL_{lab} have a higher level of uncertainty, the science suggests they are unlikely to be zero. However, assigning a non-zero value where an analyte is detected below the QL_{per} (DBQp)

would have significant compliance and enforcement implications. Therefore, the committee recommends assigning a zero in these cases.

The FACDQ agrees on the following language:
Note: The FACDQ agrees that this rationale concept is important and will be included in the Final Report.
Straw Poll: 18 Agree, 0 Not Opposed, 0 Disagree *(6/7/07 PM)*

c) To determine NPDES permit compliance, compare average and daily maximum discharge levels, calculated in accordance with item (d.ii.) below, to the respective WQBEL.

The FACDQ agreed to change "above" to "below". *(6/7/07 PM)*

d) A permittee must report to the permitting authority all information in the following manner:

i) When reporting daily maximum sample results:
- **a.** For values less than the DL_{lab}, report "ND" (not detected) on the DMR.
- **b.** For values greater or equal to the DL_{lab} and less than the QL_{per}, report "DBQp" (detected below QL_{per}) on the DMR.
- **c.** For values greater than or equal to the QL_{per}, report the actual values on the DMR.

ii) When reporting averages:
- **a.** Where all values used to calculate an average are less than DL_{lab}, report "ND" on the DMR.
- **b.** Where all values used to calculate an average are greater than or equal to DL_{lab} but less than QL_{per}, report "DBQp" on the DMR.
- **c.** When values used to calculate an average are a combination of ND and DBQp values, report "DBQp" on the DMR.
- **d.** When any value used to calculate an average is greater than or equal to QL_{per}, report on the DMR the average as calculated in item (5.A.5.b) above.

The FACDQ agrees that DL_{lab} will remain in **i.** and **ii.** With the proviso that there will be consideration of this post the MQO discussion.
Straw Vote: 15 Agree, 3 Not Opposed, 0 Disagree *(6/7/07 PM)*

iii) Additional reporting requirements:
- **a.** The regulator shall require that the permittee report the DL_{lab} and QL_{lab} (for purposes of updating methods and to determine compliance with the conditions of the permit.) The permitting authority shall report the DL_{lab}, $QL_{lab,}$ and QL_{per} for each analyte to EPA in ICIS.

b. The regulator may require the individual numeric result for any value that is greater than or equal to the DL_{lab} and less than the QL_{per} be reported in a supplemental report.

The FACDQ agreed to the remove the second sentence in **iii.b**: "Potential uses would be to determine reasonable potential and for public knowledge."
Straw Vote: 17 Agree, 0 Not Opposed, 0 Disagree, 1 Absent *(6/7/07 PM)*

c. The permittees shall maintain individual numeric results for a period of at least five years.

6) Permits shall include language that triggers additional steps when a "significant number of" (to be determined in permitting process) DBQp values are reported. These steps may include additional or accelerated monitoring, analytical studies such as matrix studies, pollutant minimization programs, or other permit conditions outside of the determination of compliance with effluent limitations. Reports under such provisions will be done outside of the DMR reporting process, except that any additional effluent testing performed using approved analytical methods as part of the special studies must be reported according to the protocol in (5.A.5.d.iii).

B. Recommendations for NPDES Permits and Compliance Uses for WQBELs when no QL_{nat} exists:

1) In the absence of QL_{nat}, the permitting authority is free to establish it's method for determining compliance for analytes that have limits/water quality standards at a level lower than that which can be detected and/or quantified.

2) For a list of analytes as defined by EPA, the permittee shall ensure that the DL_{lab}s and QL_{lab}s are determined using the steps of the procedure to determine the lowest possible value by the lab for setting QL_{lab}s and DL_{lab}s.

The FACDQ agreed to **1)** and **2)**
Straw Vote: 17 Agree, 1 Not Opposed, 0 Disagree *(6/7/07 PM)*

3) The FACDQ further recommends, for purposes of developing Part 136 QL_{nat}s, that EPA require the lab-specific information be reported in the Integrated Compliance Information System (ICIS).
Note: The FACDQ recommends that EPA reconsider the usefulness of this requirement after time.

Deleted: DL_{nat}s and

The FACDQ agreed to the following language:
3) The FACDQ further recommends, for purposes of developing Part 136 QL_{nat}s, that EPA require the lab-specific information be reported in the Integrated Compliance Information System (ICIS).
Note: The FACDQ recommends that EPA reconsider the usefulness of this requirement after time.
Straw Vote: 18 Agree, 0 Not Opposed, 0 Disagree *(6/7/07 PM)*

Deleted: DL_{nat}s and

7. Other Uses to Consider

Recommendation: The FACDQ tabled the discussion on recommendations regarding the use of detection and quantitation for other uses including but not limited to the following:

- ambient monitoring 305(b)
- pretreatment
- non-regulatory operational monitoring
- stormwater monitoring
- other studies, such as fish tissues or biosolids characterization
- reasonable potential analysis
- effluent guidelines development
- limit derivation
- development of water quality criteria

The FACDQ agreed to the language in the section "Other Uses to Consider."
Straw Vote: 17 Agree, 0 Not Opposed, 0 Disagree, 1 Absent *(6/7/07 PM)*

8. Alternative Test Procedures

Recommendation: The FACDQ tabled the option of developing recommendations to EPA on updating the Alternative Test Procedures (ATP) program. The FACDQ recommends that the ATP program be updated to be consistent with recommendations in this document.

The FACDQ agreed to the language in the section "Alternative Test Procedures."
Straw Vote: 18 Agree, 0 Not Opposed, 0 Disagree *(6/7/07 PM)*

9. GLI

Recommendation: ***The FACDQ recommends that FACDQ recommendations should not supersede the current GLI provisions. There is no significant conflict between the anticipated FACDQ recommendations and the GLI.***

The FACDQ agreed to the language in the section "GLI."
Straw Vote: 18 Agree, 0 Not Opposed, 0 Disagree (6/8/07 PM)

8. Matrix Effects (Use #6)

The FACDQ recommends that EPA consider how Matrix Effects impact detection and quantitation. The FACDQ requests that the Policy Work Group bring back a conceptual recommendation including details to be considered.
***Vote*: 17 Agree, 1 Not Opposed, 0 Disagree** *(6/8/07 PM)*